



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER

61 FORSYTH STREET

ATLANTA, GEORGIA 30303

March 9, 2010

Mr. Keith D. Roberts
Manager, Environmental Sites
Environmental Remediation
Olin Corporation
3855 North Ocoee Street, Suite 200
Cleveland, Tennessee 37312

Dear Mr. Roberts,

EPA has completed its review of "*Revised Treatability Study Work Plan, Dewatering Sediments Using Geotubes for Operable Unit (OU) 2 at the Olin McIntosh Plant sit.*" submitted on 13 January, 2010. EPA approves this Work Plan under the following conditions:

- Olin/MACTEC fully present and discuss the data collected during the dewatering treatability study in the Feasibility Report and include a discussion of how the results were used to select a specific dredging method and dewatering system from several possible alternatives;
- The tests be conducted with EPA oversight by someone with appropriate knowledge of the proposed tests ;
- At least six polymers (Krysalis FC2106D, Krysalis FC2256D, Magnafloc 336, Magnafloc 455, Zetag 7523, and Zetag 8814) be evaluated during Phase 1 of the treatability tests; and
- Duplicates of each test condition be performed.

In addition, EPA is requesting that the sampling location be modified as discussed in General Comment #2 below.

General Comments:

1. The December 2, 2009 review comments indicated that the plan should "clarify what selection criteria of dredging alternatives should be adopted from the Treatability Study results" and "specify the performance evaluation parameters and criteria for the treatability tests and their impact on selection of dewatering system design." The revised Work Plan does not address how these results will be used to select specific dredging methods from several alternatives.
2. It has been indicated in page 1-2, Section "Boundaries" of the report that "the sediment sample will be collected from one location within the Basin as discussed in Section 2. The Work Plan indicates that location was selected because it contains relatively higher mercury concentrations and is representative of the Basin and Round Pond sediments in terms of grain size and total organic content (TOC)."

EPA recommends that the proposed sediment sampling location be modified as presented in Figure A (new proposed location marked ●).

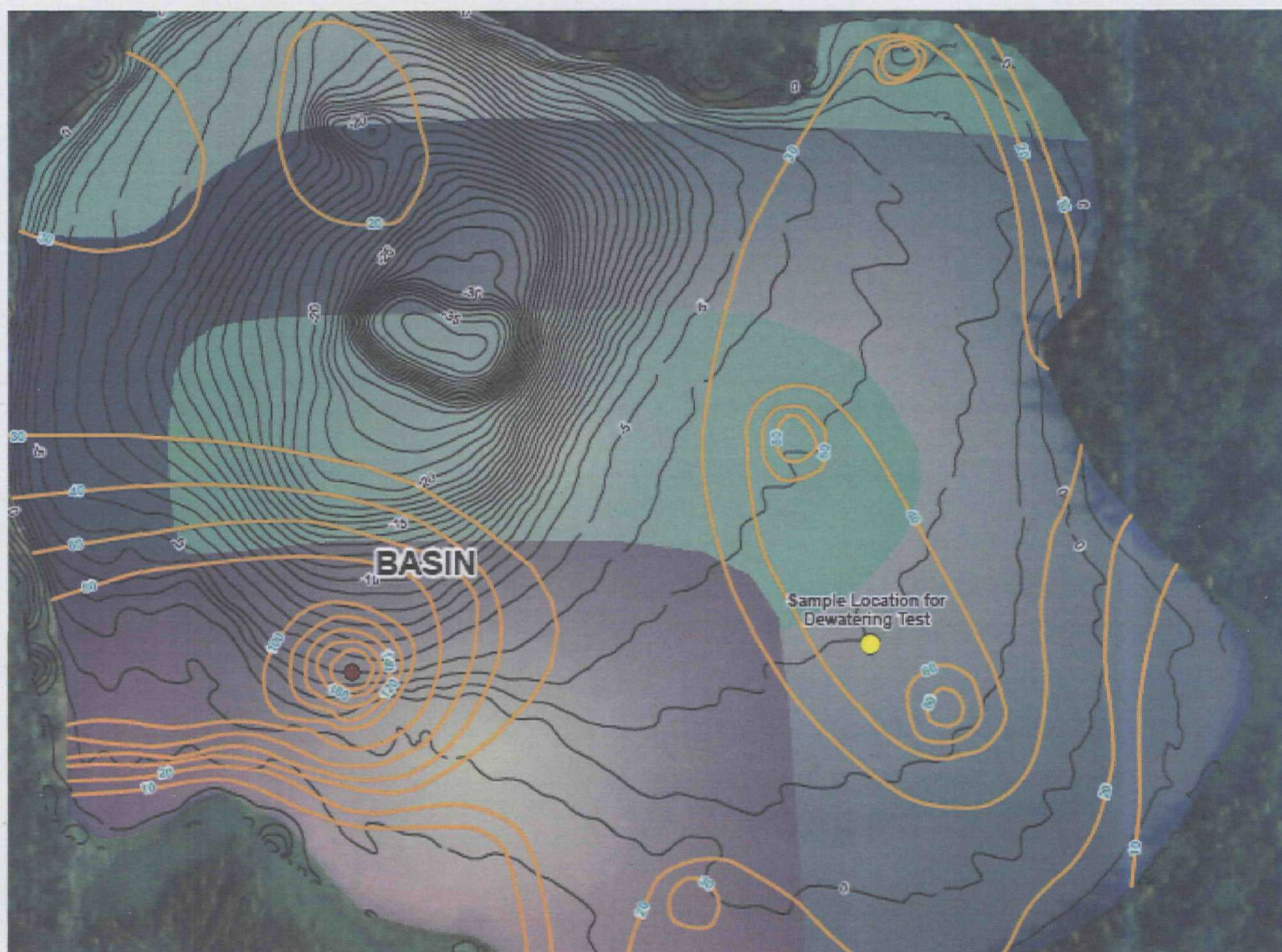


Figure A. Proposed Location for Dewatering Sample (Modified after Figure 2-1 of MACTEC Report)

The rationale for relocating the sediment sampling location and conducting the dewatering treatability tests based on this sample are indicated below:

- The concentrations of mercury (Hg) in the sediment at southwest side of the Olin Basin are higher and go deeper in the sediment profile. The efficacy of the filtration to reduce Hg can be determined by using relatively higher concentrations of Hg.
- The TOC content in the sediment is expected to have an impact on the filtration capacity. The sediment sample from southwest side of the basin has sand, and silt and TOC concentration <10,000 mg/kg. Though sand-silt grain matrix is expected to have better filtration efficiency, the impact of TOC on these sediments (dispersion versus aggregation) is not known.

Specific Comments

1. **Page 1-2. Section 1.1.** The type and number of polymers that will be used for the testing were not included in the Work Plan. It has only been specified that "several polymers will be screened for polymer selection and one type of Geotube (GT500 Textile) will be used in the dewatering studies." EPA assumes that at least 6 commonly used polymers will be evaluated and screened during the treatability study.
2. The number of samples per location that will be tested for the bench scale study has not been specified. EPA recommends that duplicate tests/analyses be conducted.

Please feel free to give me a call at 404-562-8814 if you have any questions.

Sincerely

A handwritten signature in black ink, appearing to read "Beth Walden", with a long horizontal flourish extending to the right.

Beth Walden
Remedial Project Manager